

ENVIRONMENTAL PROTECTION AGENCY

Underground Injection Control Program

Hazardous Waste Disposal Injection Restrictions;

Petition for Exemption - Class I Hazardous Waste Injection

Upjohn Company, Kalamazoo, Michigan

AGENCY: Environmental Protection Agency

ACTION: Notice of Final Decision on Petition

SUMMARY: Notice is hereby given by the United States Environmental Protection Agency (USEPA) that an exemption to the land disposal restrictions under the 1984 Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA) has been granted to the Upjohn Company, for its' two Class I injection wells located at Kalamazoo, Michigan. As required by 40 CFR Part 148, the company has adequately demonstrated, to a reasonable degree of certainty, there will be no migration of hazardous constituents from the injection zone for as long as the waste remains hazardous. This final decision allows the continued underground injection by the Upjohn Company of the specific restricted hazardous wastes, identified as F001, F002, F003, F005, D001, and D007 (see 40 CFR Part 261), exclusively into the Class I hazardous waste injection wells at the Kalamazoo facility specifically identified as Wells Number 3 and 4. This decision constitutes final USEPA action and there is no Administrative appeal process available for this final petition decision.

BACKGROUND: The Upjohn Company submitted a petition for an exemption from the land disposal restrictions on hazardous waste injection on February 22, 1988. USEPA personnel reviewed all data pertaining to the

site including, but not limited to, well construction, regional and local geologic conditions, other penetrations of the confining zone, seismic activity, and the computer model. The USEPA has determined that the geological setting at the site as well as the construction and operation of the well are adequate to prevent fluid migration out of the injection zone in the 10,000 year period, as required under 40 CFR Part 148. The injection zone for this site is the Munising Formation, and the immediate confining zone is the Trempealeau Dolomite, at a depth of 4250 feet below the surface. The confining zone is separated from the lowermost underground source of drinking water (at a depth of 370 feet below the surface) by a sequence of permeable and less permeable sedimentary rocks, which provide additional protection from fluid migration into a drinking water source. A fact sheet containing a more complete summary of the proposed decision was published in the Federal Register on October 16, 1989 (54 FR 42448).

A public notice was issued on October 6, 1989, pursuant to 40 CFR 124.10. A public hearing was held on November 16, 1989, and upon request, the public comment period was extended to December 11, 1989. Several commentors questioned whether the exemption violated the intent of the HSWA amendments; however, the exemptions are authorized under RCRA (Section 3004(d)(1), (e)(1), (f)(2), and (g)(5)). Several commentors asked about the risk of seismic activity, and the effect that this may have on the demonstration. Further review shows that seismic activity is minimal near the Upjohn site, and will pose no danger. Several commentors questioned whether the injection and confining zones were adequate to contain the acidic waste. Review of the expected chemical interactions

rock and the injected waste shows that the dissolution of rock will be minor compared to the thickness and amount of rock present. All comments have been considered in making the final decision. A responsiveness summary has been mailed to all commentors and included as part of the Administrative Record relating to this decision.

CONDITIONS: Conditions relating to the exemption may be found in 40 CFR Parts 148.23 and 148.24. In addition, the following conditions must be met:

- (1) The combined annual injection volume for Well Numbers 3 and 4 must not exceed 20 million gallons;
- (2) The injection zone shall be limited to the Munising Formation; and
- (3) Injection shall only occur into the Mt. Simon Member and into that portion of the Eau Claire Member which is below 4750 feet.

The permits governing the use of these wells have been modified to impose these conditions on Upjohn.

DATE: This Action is effective as of FEBRUARY 27, 1990.

FOR FURTHER INFORMATION CONTACT: David Werbach, Lead Petition Reviewer, USEPA - Region 5, telephone (312) 886-4242. Copies of the petition and all pertinent information relating thereto are on file and are part of the administrative record. It is recommended that you contact the lead petition reviewer prior to reviewing the administrative record.


Charles H. Sutfin
Director, Water Division

[illegible]

COPY 7 REQUESTER

TLE

Requestor: Complete items 1, 2, 7, 8, 9, 10, 11, 12 and 13. Retain copy number 7 and submit the balance with manuscript copy to the Hq. Federal Register Office.

HQ. Federal Register Office: Complete items 3, 4, 5 and 6. Retain copy number 6 and submit balance to Hq. Printing Management.

SUBMITTING ACTIVITY

3. ASSIGNED FRL NUMBER (include alpha & numeric characters for identification.)

~~Water Division, Region V~~
~~OPEN REQUISITION NUMBER~~

5. BILLING CODE

5. FORWARDED TO GSA, NARS - SIGNATURE

DATE

7. NUMBER OF MANUSCRIPT PAGES

8. ESTIMATED NUMBER OF COLUMNS

9. ESTIMATED COST	
-------------------	--

3

2

\$250.00

10. FINANCIAL DATA

FMO USE (a)														D T (b)	DOCUMENT CONTROL NO. (c)										ACCOUNT NO. (d)										OBJECT CLASS (e)				AMOUNT (f)															
																																							DOLLARS												CTS			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56									
2									0		0			2X00450A4E05X0002402																										250.00														
2									0		0																																											
2									0		0																																											

11. SIGNATURE: (a) REQUESTING OFFICER

12. SIGNATURE: (a) FEDERAL REGISTER DESIGNEE

(b) DATE

(c) TELEPHONE NUMBER

(b) DATE

(c) TELEPHONE NUMBER

2/23/90

886-4242

13. FUNDS ARE AVAILABLE (Commitment Clerk)

6800200
0A4E05X000
2402
SFO 27